20/588667

AP20 Rec'd PC7/710 04 AUG 2006

X16438 rev'd 10-July-2006 (US).ST25.txt SEQUENCE LISTING

```
Heiman, Mark Louis
Hertel, JeAnne L
<110>
<120>
       USES OF MELANOCORTIN-4 RECEPTOR (MC4R) AGONIST PEPTIDES
       ADMINISTERED BY CONTINUOUS INFUSION
<130> X16438
<140> PCT/US2004/016623
<141>
       2004-06-17
<150> US 60/479740
      2003-06-19
<151>
<150>
       US 60/570737
       2004-05-13
<151>
<160>
       201
<170>
      PatentIn version 3.3
<210>
<211>
       6
<212>
       PRT
       Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       MOD_RES
<222>
       (3)..(3)
       D form
<223>
<220>
<221>
<222>
<223>
       MOD_RES
       (6)..(6)
       AMIDATION
<400>
Cys His Phe Arg Trp Cys
1 5
       2
9
<210>
<211>
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
```

```
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
      Xaa = Cysteic acid
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
      DISULFID
       (3)..(9)
<220>
       MOD_RES
<221>
       (6)..(6)
D form
<222>
<223>
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
       AMIDATIÓN
<223>
<400> 2
Xaa Arg Cys Ala His Phe Arg Trp Cys 5
<210>
       3
       9
<211>
<212>
      PRT
<213>
      Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221> DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 3
Tyr Arg Cys Ala His Phe Arg Trp Cys
```

```
<210>
       9
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223> ACETYLATION
<220>
      DISULFID
<221>
<222> (3)..(9)
<220>
<221> MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
       (9)..(9)
<222>
<223>
       AMIDATION
<400>
Tyr Arg Cys Arg His Phe Arg Trp Cys 5
<210>
        5
        9
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
       MOD_RES
<221>
<222>
<223>
        (6)..(6)
        D form
<220>
<221>
<222>
<223>
       MOD_RES
        (9)^{-}..(9)
       AMIDATION
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<400> 5
Tyr Arg Cys Asn His Phe Arg Trp Cys
<210>
        6
<211>
<212>
        7
       PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
<223>
        MOD_RES
        (1)..(1)
       ACETYLATION
<220>
<221>
<222>
       DISULFID
        (1)..(7)
<220>
<221>
        MOD_RES
<222>
<223>
        (4)..(4)
D form
<220>
<221>
<222>
<223>
        MOD_RES (7)..(7)
        AMIDATION
<400>
        6
Cys Asp His Phe Arg Trp Cys 5
<210>
<211>
        9
<212>
       PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
        MOD_RES
        (1)..(1)
<223>
        ACETYLATION
<220>
<221>
        DISULFID
<222>
        (3)..(9)
<220>
<221>
<222>
        MOD_RES
        (6)..(6)
<223>
        D form
<220>
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<221> MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 7
Tyr Arg Cys Asp His Phe Arg Trp Cys 1
        8
7
<210>
<211>
<212>
       PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
<223>
       MOD_RES
       (1)..(1)
ACETYLATION
<220>
<221> DISULFID <222> (1)..(7)
<220>
<221> MOD_RES
<222> (4)..(4)
<223> D form
       (4)..(4)
D form
<220>
<221>
<222>
       MOD_RES (7)..(7)
<223>
       AMIDATION
<400> 8
Cys Gln His Phe Arg Trp Cys 5
<210>
        9
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<222>
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221> MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (6)..(6)
<223> D form
<400> 9
Tyr Arg Cys Gln His Phe Arg Trp Cys
1 5
<210>
      10
<211>
      9
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223> ACETYLATION
<220>
      DISULFID
<221>
<222>
      (3)..(9)
<220>
<221> MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
      (9)..(9)
<223>
       Methoxy substituted for OH
<400>
Tyr Arg Cys Gln His Phe Arg Trp Cys
<210>
       11
<211>
      9
      PRT
<212>
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222>
       (6)..(6)
       D form
<223>
<220>
<221>
       MOD_RES
<222>
      (9)..(9)
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<223>
       AMIDATION
<400>
       11
Tyr Arg Cys Gly His Phe Arg Trp Cys 1
<210> 12
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223> ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222> (6)..(6) <223> D form
<220>
       MOD_RES
<221>
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 12
Tyr Arg Cys Gly His Phe Arg Trp Cys 1
<210>
       13
<211>
       9
<212>
       PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
       MOD_RES
<221>
      (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221> DISULFID
<222> (3)..(9)
<220>
       MOD_RES
<221>
<222>
       (6)..(6)
      D form
<223>
```

```
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 13
Tyr Arg Cys His His Phe Arg Trp Cys 5
<210>
       14
<211>
       9
       PRT
<212>
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
<223>
       MOD_RES
        (1)..(1)
        ACETYLATION
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
<221>
<222>
<223>
       MOD_RES
       (6)..(6)
D form
<220>
<221>
<222>
       MOD_RES
        (9)..(9)
<223>
       AMIDATION
<400> 14
Tyr Arg Cys Ile His Phe Arg Trp Cys
      15
7
<210>
<211>
<212>
      PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (1)..(7)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
       MOD_RES
<222>
<223>
       (4)..(4)
D form
<220>
<221>
        MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400>
       15
Cys Leu His Phe Arg Trp Cys
5
<210> 16
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID (1)..(7)
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
D form
<223>
<220>
<221>
<222>
<223>
       MOD_RES
        (7)..(7)
        AMIDATION
<400> 16
Cys Lys His Phe Arg Trp Cys
5
<210>
        17
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
<222> (1)..(1)
<223> METHYLATION
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 17
Tyr Arg Cys Met His Phe Arg Trp Cys
<210>
       18
       9
<211>
       PRT
<212>
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400>
Tyr Arg Cys Met His Phe Arg Trp Cys 1 \hspace{1cm} 5
<210>
       19
       9
<211>
       PRT
<212>
<213>
       Artificial
<220>
       Synthetic construct
<223>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<220>
      DISULFID
<221>
<222>
      (3)..(9)
<220>
      MOD_RES
<221>
<222>
      (6)..(6)
<223> D form
<220>
       MOD_RES
<221>
<222>
       (9)..(9)
<223>
      AMIDATION
<400> 19
Tyr Arg Cys Phe His Phe Arg Trp Cys 5
<210>
       20
<211>
       9
<212>
       PRT
<213>
      Artificial
<220>
<223>
      Synthetic construct
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
      D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 20
Tyr Arg Cys Pro His Phe Arg Trp Cys
<210>
       21
       9
<211>
<212>
       PRT
       Artificial
<213>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)...(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
D form
<223>
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
      AMIDATION
<223>
<400> 21
Tyr Arg Cys Ser His Phe Arg Trp Cys
<210> 22
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<222>
<220>
<221>
      DISULFID
<222> (3)..(9)
<220>
      MOD_RES
<221>
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
      AMIDATION
<400> 22
Tyr Arg Cys Thr His Phe Arg Trp Cys
<210> 23
<211> 9
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
       (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221> MOD_RE>
<222> (6)..(6)
<223> D form
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400>
Tyr Arg Cys Trp His Phe Arg Trp Cys \frac{1}{5}
<210>
       24
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223> ACETYLATION
<220>
<221> DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 24
Tyr Arg Cys Tyr His Phe Arg Trp Cys 5
```

```
25
9
<210>
<211>
        9
<212> PRT
       Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
        DISULFID
       (3)..(9)
<220>
<221>
<222>
<223>
       MOD_RES
       (6)..(6)
D form
<220>
<221>
       MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 25
Tyr Arg Cys Val His Phe Arg Trp Cys
5
<210>
        26
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
        MISC_FEATURE
       (3)..(3)
Xaa = cysteic acid
<223>
<220>
<221>
<222>
       MOD_RES
<222> (5)..(5) <223> D form
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
       MOD_RES
        (8)..(8)
<223>
       AMIDATION
<400> 26
Arg Cys Xaa His Phe Arg Trp Cys
<210>
       27
<211>
       8
<212>
<213>
       PRT
      Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
       D form
<223>
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MISC_FEATURE
       (3)..(3)
<223>
       Xaa = cysteic acid
<220>
<221>
       MOD_RES
<222>
<223>
       (5)..(5)
D form
<220>
<221>
       MOD_RES
<222>
       (8)..(8)
<223>
       AMIDATION
<400> 27
Arg Cys Xaa His Phe Arg Trp Cys
      28
9
<210>
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
<223>
        MOD_RES
        (1)..(1)
ACETYLATION
<220>
<221> DISULFID <222> (3)..(9)
<220>
<221>
<222>
       MISC_FEATURE
        (4)..(4)
       Xaa = cysteic acid
<223>
<220>
       MOD_RES
<221>
<222> (6)..(6)
<223> D form
<220>
<221>
       MOD_RES
<222>
<223>
        (9)..(9)
        AMIDATION
<400> 28
Tyr Arg Cys Xaa His Phe Arg Trp Cys \frac{1}{5}
<210> 29
<211> 7
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       DISULFID (1)..(7)
<221>
<222>
<220>
<221>
        MOD_RES
<222>
       (4)..(4)
D form
<223>
<220>
<221>
<222>
       MOD_RES
        (7)..(7)
AMIDATION
<223>
<400> 29
Cys Glu His Phe Arg Trp Cys
1 5
<210> 30
<211> 7
<212> PRT
<213> Artificial
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<223>
       Synthetic construct
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
      DISULFID
<222>
      (1)..(7)
<220>
<221>
<222>
       MOD_RES
      (4)..(4)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 30
Cys Glu His Phe Arg Trp Cys
5
      31
7
<210>
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
      MOD_RES
      (1)..(1)
ACETYLATION
<223>
<220>
<221>
       DISULFID
       (1)..(7)
<222>
<220>
<221>
      MOD_RES
       (4)..(4)
4-fluoro substituted, D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400>
Cys Glu His Phe Arg Trp Cys
5
<210> 32
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<211> 7
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221> MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<222>
<220>
<221>
      DISULFID
<222>
      (1)..(7)
<220>
<221>
<222>
       MOD_RES
      (4)..(4)
      4-chloro substituted, D form
<223>
<220>
<221>
<222>
       MOD_RES
       (7)..(7)
<223>
      AMIDATION
<400> 32
Cys Glu His Phe Arg Trp Cys
5
<210> 33
<211> 7
      PRT
<212>
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (1)..(7)
<220>
<221>
       MOD_RES
<222>
       (4)..(4)
<223>
      4-bromo substituted, D form
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 33
Cys Glu His Phe Arg Trp Cys
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
1
        34
7
<210>
<211>
<212>
       PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (1)..(7)
<220>
<221>
<222>
        MOD_RES
       (3)..(3)
1-methyl substituted
<223>
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
D form
<223>
<220>
<221>
<222>
        MOD_RES
       (7)..(7)
<223>
       AMIDATION
<400> 34
Cys Glu His Phe Arg Trp Cys
5
       35
<210>
       9
<211>
<212>
       PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
       DISULFID
       (1)..(7)
<220>
<221>
        MOD_RES
<222>
      (4)..(4)
D form
<223>
```

```
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
        AMIDATION
<400>
        35
Cys Glu His Phe Arg Trp Cys Lys Pro 1
<210>
        36
<211>
       9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID
       (1)..(7)
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
D form
<223>
<220>
<221>
<222>
       MOD_RES (9)..(9)
<223>
       AMIDATION
<400> 36
Cys Glu His Phe Arg Trp Cys Ser Pro 1
<210> 37
<211> 7
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223> N-propionyl substituted
<220>
<221>
       DISULFID
<222> (1)..(7)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
       MOD_RES
<221>
       (4)..(4)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 37
Cys Glu His Phe Arg Trp Cys 5
<210>
       38
<211>
      PRT
Artificial
<212>
<213>
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
       (1)..(1)
N-butyryl substituted
<222>
<223>
<220>
<221>
       DISULFID
<222>
       (1)..(7)
<220>
       MOD_RES
<221>
       (4)..(4)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 38
Cys Glu His Phe Arg Trp Cys
5
<210> 39
<211> 7
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       MOD_RES
<222> (1)..(1)
<223> N-valeryl substituted
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
       DISULFID
       (1)..(7)
<220>
       MOD_RES
<221>
<222>
<223>
       (4)^{-}. (4)
       D form
<220>
<221>
<222>
       MOD_RES
       (7)..(7)
<223>
       AMIDATION
<400> 39
Cys Glu His Phe Arg Trp Cys 5
<210>
       40
<211>
<212>
       PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
3-guanidinopropionyl substituted
<223>
<220>
<221>
<222>
       DISULFID (1)..(7)
<220>
<221>
<222>
<223>
       MOD_RES
       (4)..(4)
D form
<220>
<221>
        MOD_RES
<222>
       (7)..(7)
AMIDATION
<223>
<400>
        40
Cys Glu His Phe Arg Trp Cys
5
       41
7
<210>
<211>
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MOD_RES
<222>
      (1)..(1)
4-guanidinobutyryl substituted
<223>
<220>
<221>
      DISULFID
<222>
      (1)..(7)
<220>
<221>
      MOD_RES
<222>
      (4)..(4)
<223>
      D form
<220>
<221>
<222>
      MOD_RES
      (7)..(7)
<223>
      AMIDATION
<400> 41
Cys Glu His Phe Arg Trp Cys
5
<210>
      42
      7
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
<222>
      (1)..(1)
5-guanidinovaleryl substituted
<223>
<220>
<221>
      DISULFID
<222> (1)..(7)
<220>
      MOD_RES
<221>
<222>
      (4)..(4)
D form
<223>
<220>
<221>
      MOD_RES
<222>
      (7)..(7)
<223>
      AMIDATION
<400> 42
Cys Glu His Phe Arg Trp Cys
5
<210>
       43
<211>
       7
<212>
       PRT
<213>
      Artificial
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222> (1)..(1)
      acetyl-diaminopropionyl substituted
<220>
<221> DISULFID
<222> (1)..(7)
<220>
<221>
      MOD_RES
<222> (4)..(4)
<223> D form
<220>
<221> MOD_RES
<222>
       (7)..(7)
<223> AMIDATION
<400> 43
Cys Glu His Phe Arg Trp Cys
5
<210> 44
<211> 7
<212>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-diaminobutyryl substituted
<220>
<221> DISULFID
<222> (1)..(7)
<220>
<221> MOD_RES
<222> (4)..(4)
<223> D form
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 44
Cys Glu His Phe Arg Trp Cys
1 5
<210> 45
<211> 8
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       DISULFID
       (2)..(8)
<220>
       MOD_RES
<221>
      (5)..(5)
D form
<222>
<223>
<400> 45
Arg Cys Glu His Phe Arg Trp Cys
1 5
      46
<210>
<211> 8 
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
      (1)..(1)
D form
<223>
<220>
<221>
       DISULFID
<222>
      (2)..(8)
<220>
<221>
<222>
       MOD_RES
      (5)..(5)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (8)..(8)
<223>
       AMIDATION
<400>
       46
Arg Cys Glu His Phe Arg Trp Cys 5
<210> 47
<211> 8
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
```

```
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       MOD_RES
       (1)^{-}..(1)
<223>
       D form
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (8)..(8)
<223>
       AMIDATION
<400> 47
Arg Cys Glu His Phe Arg Trp Cys
1 5
<210>
       48
<211> 8
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
       (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
      D form
<223>
<220>
<221>
<222>
       MOD_RES
       (8)..(8)
<223>
       AMIDATION
<400> 48
Arg Cys Glu His Phe Arg Trp Cys
1 5
<210>
      49
<211> 8
<212>
      PRT
<213> Artificial
```

```
<220>
<223> Synthetic construct
<220>
<221>
        MOD_RES
<222>
       (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221> MOD_RES
<222> (5)..(5)
<223> D form
<400> 49
Arg Cys Glu His Phe Arg Trp Cys 5
<210> 50
<211> 8
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
       (1)..(1)
<223> ACETYLATION
<220>
       DISULFID
<221>
<222>
       (2)..(8)
<220>
<221> MOD_RES <222> (5)..(5)
       4-chloro substituted, D form
<220>
<221>
        MOD_RES
<222>
       (8)..(8)
<223>
        AMIDATION
<400>
Arg Cys Glu His Phe Arg Trp Cys
5
<210> 51
<211> 8
<212> PRT
<213> Artificial
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<223>
         Synthetic construct
<220>
<221>
<222>
         MOD_RES
         (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
         DISULFID
         (2)..(8)
<220>
<221>
        MOD_RES
<222>
<223>
         (4)..(4)
1-methyl substituted
<220>
<221>
        MOD_RES
<222>
<223>
         (5)..(5)
D form
<220>
<221>
         MOD_RES
<222>
         (8)..(8)
<223>
         AMIDATION
<400>
         51
Arg Cys Glu His Phe Arg Trp Cys
<210>
        52
<211>
<212>
        PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
        MOD_RES
         (1)..(1)
<223>
        ACETYLATION
<220>
        MOD_RES (1)..(1) D form
<221>
<222>
<223>
<220>
<221>
        DISULFID
<222>
         (2)..(8)
<220>
<221>
<222>
<223>
        MOD_RES
        (5)..(5)
D form
<220>
<221>
        MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (8)..(8)
<223> AMIDATION
<400> 52
Arg Cys Glu His Phe Arg Trp Cys
<210>
      53
<211>
      8
      PRT
<212>
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
      ACETYLATION
<223>
<220>
<221>
<222>
      MOD_RES
      (1)..(1)
<223>
      D form
<220>
<221>
      DISULFID
<222>
      (2)..(8)
<220>
<221>
      MOD_RES
<222>
      (5)..(5)
<223>
      D form
<400> 53
Arg Cys Glu His Phe Arg Trp Cys
<210>
      54
<211>
      8
<212>
     PRT
Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      MISC_FEATURE
<222>
      (1)..(1)
<223>
      Xaa = homoarginine
<220>
<221>
      DISULFID
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (2)..(8)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
D form
<223>
<220>
       MOD_RES
<221>
<222>
       (8)..(8)
<223>
       AMIDATION
<400> 54
Xaa Cys Glu His Phe Arg Trp Cys
5
<210>
       55
       8
<211>
<212>
       PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
<223>
       (1)..(1)
ACETYLATION
<220>
<221>
       MISC_FEATURE
<222>
      (1)..(1)
Xaa = citrulline
<223>
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
       MOD_RES
       (5)..(5)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
<223>
       (8)..(8)
       AMIDATION
<400> 55
Xaa Cys Glu His Phe Arg Trp Cys
1
<210> 56
<211> 8
<212> PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
```

```
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
Xaa = citrulline
<223>
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
       1-methyl substituted
<223>
<220>
<221>
       MOD_RES
       (5)..(5)
D form
<222>
<223>
<220>
<221>
<222>
       MOD_RES
       (8)..(8)
<223>
       AMIDATION
<400> 56
Xaa Cys Glu His Phe Arg Trp Cys
<210>
       57
       8
<211>
       PRT
Artificial
<212>
<213>
<220>
<223>
       Synthetic construct
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
       DISULFID
<221>
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (8)..(8)
<223>
       AMIDATION
```

```
<400> 57
Leu Cys Glu His Phe Arg Trp Cys 5
<210>
       58
<211>
       8
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
      ACETYLATION
<220>
<221>
<222>
       DISULFID
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
      D form
<223>
<220>
<221>
<222>
       MOD_RES (8)..(8)
<223>
       AMIDATION
<400>
Lys Cys Glu His Phe Arg Trp Cys
1 5
<210>
       59
<211> 8
<212> PRT
<213> Artificial
<220>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223> Xaa = N(epsilon)-isopropyl lysine
<220>
<221> DISULFID
<222> (2)..(8)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (8)..(8)
<223>
       AMIDATION
<400>
       59
Xaa Cys Glu His Phe Arg Trp Cys
<210>
       60
<211>
       8
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)^{-}..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223> Xaa = norleucine
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
D form
<223>
<220>
<221>
<222>
       MOD_RES
        (8)..(8)
       AMIDATION
<223>
<400> 60
Xaa Cys Glu His Phe Arg Trp Cys
<210>
        61
<211>
       10
<212>
       PRT
<213> Artificial
<220>
<223>
       Synthetic construct
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
<223>
        MOD_RES
        (1)..(1)
       ACETYLATION
<220>
<221>
<222>
        MISC_FEATURE
        (1)..(1)
<223>
       Xaa = norleucine
<220>
<221>
<222>
       DISULFID
       (2)..(8)
<220>
        MOD_RES
<221>
       (5)..(5)
D form
<222>
<223>
<220>
<221>
       MOD_RES
       (10)..(10)
<222>
<223>
        AMIDATION
<400> 61
Xaa Cys Glu His Phe Arg Trp Cys Ser Pro
1 5 10
<210>
       62
<211> 8
<212> PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223>
       Xaa = Ornithine
<220>
<221>
<222>
       DISULFID
       (2)..(8)
<220>
<221>
<222>
        MOD_RES
       (5)..(5)
D form
<223>
<220>
<221>
<222>
        MOD_RES
        (8)..(8)
<223>
        AMIDATION
<400>
        62
```

X16438 rev'd 10-July-2006 (US).ST25.txt Xaa Cys Glu His Phe Arg Trp Cys 1 5 <210> 63 <211> <212> PRT Artificial <213> <220> <223> Synthetic construct <220> <221> MOD_RES (1)..(1) ACETYLATION <222> <223> <220> <221> <222> DISULFID (2)..(8)<220> <221> MOD_RES (5)..(5) D form <222> <223> <220> <221> MOD_RES <222> <223> (8)..(8)**AMIDATION** <400> 63 Val Cys Glu His Phe Arg Trp Cys 1 5 <210> 64 <211> 8 <212> PRT Artificial <213> <220> <223> Synthetic construct <220> <221> <222> MOD_RES (1)..(1) N-(2-naphthalenesulfonyl) substituted, D form <223> <220> <221> DISULFID <222> (2)..(8)<220> <221> MOD_RES <222> <223> (5)..(5) D form

<220>

<221> MOD_RES

```
X16438 rev'd 10-July-2006 (US).ST25.txt
        (8)..(8)
<222>
<223>
       AMIDATION
<400> 64
Arg Cys Glu His Phe Arg Trp Cys
1
<210>
       65
<211>
       8
<212>
       PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
        N-(2-naphthalenesulfonylamino-4-oxo-butyryl) substituted
<223>
<220>
<221>
<222>
       MOD_RES
<222> (1)..(1)
<223> D form
<220>
<221>
<222>
       DISULFID
       (2)..(8)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
D form
<223>
<220>
<221>
       MOD_RES
<222>
<223>
       (8)..(8)
       AMIDATION
<400> 65
Arg Cys Glu His Phe Arg Trp Cys 5
<210>
       66
<210> 66
<211> 8
<212> PRT
<213>
      Artificial
<220>
<223>
        Synthetic construct
<220>
<221>
<222>
<223>
        MOD_RES
        (1)..(1)
3-(4-hydroxyphenyl)propionyl substituted
<220>
<221>
        DISULFID
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (2)..(8)
<220>
<221>
       MOD_RES
     (5)..(5)
D form
<222>
<223>
<220>
<221>
      MOD_RES
<222>
       (8)..(8)
<223>
       AMIDATION
<400> 66
Arg Cys Glu His Phe Arg Trp Cys
<210>
      67
<211>
      8
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
       (1)..(1)
3-(4-methylbenzoyl)propionyl) substituted
<222>
<223>
<220>
<221>
      DISULFID
<222>
      (2)..(8)
<220>
<221>
      MOD_RES
      (5)..(5)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (8)..(8)
<223>
       AMIDATION
<400>
Arg Cys Glu His Phe Arg Trp Cys
<210>
       68
       9
<211>
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
      (3)..(9)
<222>
```

```
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
<223>
       D form
<220>
<221>
<222>
        MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 68
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210>
       69
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
D form
<223>
<400>
Tyr Arg Cys Glu His Phe Arg Trp Cys
5
<210>
        70
<211> 9
<212> PRT
<213> Artificial
<220>
       Synthetic construct
<220>
<221>
        DISULFID
<222>
        (3)..(9)
<220>
<221>
        MOD_RES
<222>
       (6)..(6)
       D form
<220>
<221>
<222>
        MOD_RES
<222> (9)..(9)
<223> NH-(CH2)6-NH2 substituted
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<400> 70
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
       71
<211>
       10
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
<223>
       MOD_RES
        (6)..(6)
       D form
<220>
<221>
<222>
       MOD_RES
        (10)..(10)
<223>
       AMIDATION
<400> 71
Tyr Arg Cys Glu His Phe Arg Trp Cys Glu
<210>
       72
<211>
       9
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
        (6)..(6)
<223>
       D form
<220>
<221>
<222>
       MOD_RES
        (9)..(9)
<223>
       AMIDATION
<400>
       72
```

X16438 rev'd 10-July-2006 (US).ST25.txt Tyr Arg Cys Glu His Phe Arg Trp Cys $\frac{1}{5}$ <210> 73 <211> 9 <212> PRT <213> Artificial <220> <223> Synthetic construct <220> MOD_RES <221> (1)..(1) ACETYLATION <222> <223> <220> <221> DISULFID <222> (3)..(9)<220> <221> MOD_RES <222> (6)..(6)D form <223> <400> Tyr Arg Cys Glu His Phe Arg Trp Cys 5 <210> 74 <211> 9 <212> PRT <213> Artificial <220> <223> Synthetic construct <220> <221> MOD_RES <222> (1)..(1)N-succinyl substituted <223> <220> <221> <222> DISULFID (3)..(9)<220> <221> MOD_RES (6)..(6) D form <222> <223> <220> <221> MOD_RES <222> <223> (9)..(9)AMIDATION

<400> 74

```
X16438 rev'd 10-July-2006 (US).ST25.txt
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
      75
<211>
      9
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
      MOD_RES
<221>
<222>
      (1)..(1)
     N-glutaryl substituted
<220>
<221>
      DISULFID
<222> (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
      D form
<220>
<221>
      MOD_RES
<222>
       (9)..(9)
<223>
      AMIDATION
<400> 75
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
       76
      9
<211>
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223> N-glutaryl substituted
<220>
<221>
       DISULFID
       (3)..(9)
<222>
<220>
<221>
      MOD_RES
<222>
       (6)..(6)
       D form
<223>
<400>
      76
Tyr Arg Cys Glu His Phe Arg Trp Cys
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
1
<210>
      77
       9
<211>
      PRT
<212>
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      gluconoyl substituted
<220>
<221>
      DISULFID
      (3)..(9)
<222>
<220>
<221>
<222>
      MOD_RES
      (6)..(6)
D form
<223>
<220>
<221>
<222>
      MOD_RES
      (9)..(9)
<223>
      AMIDATION
<400> 77
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
      78
<211> 9
     PRT
Artificial
<212>
<213>
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222>
       (6)..(6)
<223>
      D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223> Xaa = Cys reduced from amino acid to amino alcohol
                                  Page 42
```

X16438 rev'd 10-July-2006 (US).ST25.txt <400> 78 Tyr Arg Cys Glu His Phe Arg Trp Xaa <210> 79 <211> 9 <212> PRT <213> Artificial <220> <223> Synthetic construct <220> <221> MOD_RES <222> (1)..(1) ACETYLATION <220> <221> MOD_RES <222> (2)..(2)D form <223> <220> <221> DISULFID <222> (3)..(9)<220> <221> <222> MOD_RES (6)..(6) D form <223> <220> <221> <222> MOD_RES (9)..(9)<223> AMIDATION <400> 79 Tyr Arg Cys Glu His Phe Arg Trp Cys 1<210> 80 <211> 9 <212> PRT <213> Artificial

```
<220>
<221> MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<220>
<221> DISULFID
<222> (3)..(9)
```

<220>

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
       MOD_RES
       (3)..(3)
D form
<222>
<223>
<220>
<221>
       MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 80
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210>
       81
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
<223>
       MOD_RES
       (1)..(1)
ACETYLATION
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
<223>
       (5)..(5)
1-methyl substituted
<220>
<221>
       MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
        (9)..(9)
<223>
       AMIDATION
<400> 81
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210>
       82
<211>
        9
<212> PRT
      Artificial
<213>
```

```
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
      (5)..(5)
1-methyl substituted, D form
<222>
<223>
<220>
<221>
      MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 82
Tyr Arg Cys Glu His Phe Arg Trp Cys 1
<210> 83
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
      (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
       (6)..(6)
4-fluoro substituted, D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)^{-}.(9)
<223>
       AMIDATION
<400>
       83
```

```
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
      84
       9
<211>
      PRT
<212>
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
ACETYLATION
<223>
<220>
<221> DISULFID
<222>
      (3)..(9)
<220>
<221>
       MOD_RES
<222>
      (5)..(5)
1-methyl substituted
<223>
<220>
<221>
       MOD_RES
<222>
<222> (6)..(6)
<223> 4-fluoro substituted, D form
<220>
<221>
       MOD_RES
<222>
<222> (9)..(9)
<223> AMIDATION
<400> 84
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210> 85
       9
<211>
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (5)..(5)
<223> 1-methyl substituted, D form
<220>
<221>
<222>
       MOD_RES
      (6)..(6)
4-fluoro substituted, D form
<223>
<220>
<221> MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 85
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210> 86
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221> MOD_RES
<222> (6)..(6)
<223> 4-chloro substituted, D form
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 86
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210> 87
<211> 8
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221> MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
       1-methyl substituted
<223>
<220>
<221>
       MOD_RES
      (5)..(5)
4-chloro substituted, D form
<222>
<223>
<220>
<221>
<222>
      MOD_RES
      (8)..(8)
<223>
      AMIDATION
<400> 87
Arg Cys Glu His Phe Arg Trp Cys
<210>
      88
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
      (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
      (5)..(5)
1-methyl substituted, D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       4-chloro substituted, D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 88
Tyr Arg Cys Glu His Phe Arg Trp Cys
```

```
1
<210>
       89
<211>
       9
<212>
      PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       4-bromo substituted, D form
<220>
<221>
<222>
       MOD_RES (9)..(9)
<223>
       AMIDATION
<400> 89
Tyr Arg Cys Glu His Phe Arg Trp Cys \frac{1}{5}
<210>
       90
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
      (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
       1-methyl substituted
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       4-bromo substituted, D form
```

```
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 90
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
       91
<211>
       9
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
      (5)..(5)
1-methyl substituted, D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
      4-bromo substituted, D form
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 91
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210>
       92
<211>
       9
<212>
      PRT
<213>
      Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
```

```
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
<221>
        MOD_RES
<222>
        (6)..(6)
       4-methyl substituted, D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 92
Tyr Arg Cys Glu His Phe Arg Trp Cys 1 \hspace{1cm} 5
<210>
        93
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
<223>
        MOD_RES
        (1)..(1)
       ACETYLATION
<220>
<221>
<222>
        DISULFID
        (3)..(9)
<220>
        MOD_RES
<221>
<222>
<223>
        (6)..(6)
       4-methoxy substituted, D form
<220>
<221>
        MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 93
Tyr Arg Cys Glu His Phe Arg Trp Cys
1 5
<210> 94
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
       DISULFID
<221>
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
       1-methyl substituted
<223>
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       4-methoxy substituted, D form
<220>
<221>
      MOD_RES
<222>
<223>
       (9)..(9)
       AMIDATION
<400> 94
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
       95
<211>
       9
<212>
       PRT
<213>
      Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       MOD_RES
<222>
<223>
       (1)..(1)
       ACETYLATION
<220>
       DISULFID
<221>
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
       1-methyl substituted, D form
<223>
<220>
       MOD_RES
<221>
<222>
       (6)..(6)
       4-methoxy substituted, D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400>
       95
```

X16438 rev'd 10-July-2006 (US).ST25.txt Tyr Arg Cys Glu His Phe Arg Trp Cys <210> 96 9 <211> <212> PRT Artificial <213> <220> <223> Synthetic construct <220> <221> MOD_RES <222> (1)..(1)<223> ACETYLATION <220> <221> DISULFID <222> (3)..(9) <220> <221> MOD_RES <222> (5)..(5) 3-methyl substituted <223> <220> <221> MOD_RES <222> (6)..(6)<223> D form <220> <221> MOD_RES <222> (9)..(9)<223> AMIDATION <400> 96 Tyr Arg Cys Glu His Phe Arg Trp Cys 1<210> 97 9 <211> <212> PRT Artificial <213> <220> <223> Synthetic construct <220> <221> MOD_RES <222> (1)..(1)<223> ACETYLATION

<220> <221>

<222>

<220>

DISULFID

(3)..(9)

<221> MOD_RES

Page 53

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (5)..(5)
<223> 5-methyl substituted
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
<223>
       D form
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 97
Tyr Arg Cys Glu His Phe Arg Trp Cys {\bf 5}
<210>
        98
<211> 9
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<220>
       DISULFID
<221>
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
5-methyl substituted, D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 98
Tyr Arg Cys Glu His Phe Arg Trp Cys ^{5}
<210>
        99
       9
<211>
<212>
       PRT
       Artificial
<213>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
<222>
      MOD_RES
      (5)..(5)
<223>
      1-benzyl substituted
<220>
<221> MOD_RES
<222> (6)..(6)
<223> D form
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 99
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210>
      100
<211>
      9
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222> (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
<223>
       1-benzyl substituted, D form
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
       D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223>
      AMIDATION
<400> 100
Tyr Arg Cys Glu His Phe Arg Trp Cys
5
<210> 101
<211> 9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223> ACETYLATION
<220>
<221> DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222>
      (5)..(5)
      1-benzyloxymethyl substituted
<223>
<220>
<221>
<222>
      MOD_RES
      (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 101
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210> 102
<211>
      9
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
      (3)..(9)
```

```
<220>
      MOD_RES
<221>
<222>
<223>
       (5)..(5)
       1-pyrazolyl substituted
<220>
<221>
       MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 102
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
<210>
       103
<211>
       9
<212>
       PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
        (5)..(5)
<223>
       4-phenyl-1H-imidazol-2-yl substituted
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
       D form
<223>
<220>
<221>
<222>
       MOD_RES
        (9)..(9)
<223>
       AMIDATION
<400> 103
Tyr Arg Cys Glu Ala Phe Arg Trp Cys 5
<210>
<211>
       104
       9
<212>
      PRT
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
      (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
       MOD_RES
<221>
<222>
       (5)..(5)
       4-phenyl-1H-imidazol-2-yl substituted, D form
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
       MOD_RES
<221>
<222>
       (9)..(9)
<223>
       AMIDATION
<400>
       104
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
<210> 105
<211> 9
<211>
       9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
       (5)..(5)
2-pyrazine substituted
<222>
<223>
<220>
<221>
<222>
      MOD_RES
<222> (6)..(6)
<223> D form
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
        MOD_RES
<221>
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 105
Tyr Arg Cys Glu Ala Phe Arg Trp Cys 5
<210>
       106
<211>
<212>
       9
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221> DISULFID
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
beta-(1,2,4-triazol-3-yl) substituted
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
<223>
       (9)..(9)
       AMIDATION
<400> 106
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
1 5
<210> 107
<211> 9
<212> PRT
<213>
      Artificial
<220>
<223>
       Synthetic construct
<220>
<221> MOD_RES <222> (1)..(1)
<222> (1)..(1)
<223> ACETYLATION
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
       DISULFID
<221>
<222>
       (3)..(9)
<220>
       MOD_RES
<221>
       (5)..(5)
beta-(1,2,4-triazol-3-yl) substituted, D form
<222>
<220>
<221>
       MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
        MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400>
       107
Tyr Arg Cys Glu Ala Phe Arg Trp Cys 5
<210>
       108
<211>
<212>
        9
        PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
       DISULFID
       (3)..(9)
<220>
<221>
        MOD_RES
       (5)..(5) beta-((1-benzyl)-1,2,4-triazol-3-yl) substituted
<222>
<223>
<220>
       MOD_RES
<221>
<222>
<223>
       (6)..(6)
D form
<220>
<221>
        MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 108
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
1 5
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<210>
       109
<211>
       9
<212>
       PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
      (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
<223>
       beta-((1-benzyl)-1,2,4-triazol-3-yl) substituted, D form
<220>
<221>
       MOD_RES
<222>
      (6)..(6)
      Dform
<223>
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
      AMIDATION
<400> 109
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
1
<210>
      110
<211>
      9
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
      MOD_RES
<221>
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
      (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
       beta-(2-furyl) substituted
<223>
<220>
<221>
      MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (6)..(6)
<223> D form
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400>
      110
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
5
<210>
      111
<211>
      9
      PRT
Artificial
<212>
<213>
<220>
<223>
     Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
     DISULFID
<221>
      (3)..(9)
<222>
<220>
<221>
      MOD_RES
<222>
      (5)..(5)
<223>
      beta-(thien-2-yl) substituted
<220>
<221> MOD_RES
<222>
      (6)..(6)
<223> D form
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 111
Tyr Arg Cys Glu Ala Phe Arg Trp Cys 5
<210>
     112
      9
<211>
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
<223>
       beta-(1,3-thiazol-4-yl) substituted
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 112
Tyr Arg Cys Glu Ala Phe Arg Trp Cys ^{5}
<210>
       113
<211>
       9
<212>
       PRT
<213>
      Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
      ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
       beta-(pyridin-4-yl) substituted
<223>
<220>
<221>
       MOD_RES
       (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 113
Tyr Arg Cys Glu Ala Phe Arg Trp Cys
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
1
<210>
        114
<211>
       9
<212>
       PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       glycinol substituted
<400> 114
Tyr Arg Cys Glu His Phe Arg Trp Cys 5
<210> 11
<211> 9
<210>
       115
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
D form
<223>
<220>
       MOD_RES
(9)..(9)
2-(2-aminoethoxy)ethanol substituted
<221>
<222>
                                      Page 64
```

X16438 rev'd 10-July-2006 (US).ST25.txt Tyr Arg Cys Glu His Phe Arg Trp Cys 5

```
<210>
      116
<211>
      10
<212> PRT
<213> Artificial
<220>
```

<223> Synthetic construct

<220> <221> <222> MOD_RES (1)..(1)ACETYLATION <223> <220> <221> <222> DISULFID (3)..(9)

<400> 115

<220> <221> MOD_RES <222> (6)..(6)<223> D form

<220> <221> <222> MOD_RES (10)..(10)<223>

Xaa = Ser reduced from amino acid to amino alcohol

<400> 116

Tyr Arg Cys Glu His Phe Arg Trp Cys Xaa 1 5 10

<210> 117 <211> 9 <212> PRT <213> Artificial <220> <223> Synthetic construct <220> <221> <222> MOD_RES (1)..(1) <223> ACETYLATION <220> <221> <222> **DISULFID** (3)..(9)

<220> <221> MOD_RES <222> (6)..(6) <223> D form

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
NH-(CH2)6-NH2 substituted
<223>
<400> 117
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
       118
<211>
       10
       PRT
<212>
       Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
D form
<223>
<220>
       MOD_RES
<221>
       (10)..(10)
<222>
<223>
       AMIDATION
<400>
       118
Tyr Arg Cys Glu His Phe Arg Trp Cys Glu 1 5 10
<210> 119
<211> 11
<212> PRT
<210>
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MOD_RES
<222> (6)..(6)
<223> D form
<220>
<221>
       MOD_RES
<222>
      (11)..(11)
      AMIDATION
<223>
<400> 119
Tyr Arg Cys Glu His Phe Arg Trp Cys Ser Pro
1 5 10
<210>
       120
<211>
      11
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222> (3)..(9)
<220>
<221>
<222>
       MOD_RES
      (6)..(6)
<223>
      D form
<220>
<221>
       MOD_RES
<222>
       (11)..(11)
<223>
       Xaa = Pro reduced from amino acid to amino alcohol
<400>
       120
Tyr Arg Cys Glu His Phe Arg Trp Cys Ser Xaa
<210>
       121
<211>
       11
<212>
       PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> DISULFID
<222> (3)..(9)
<220>
<221>
       MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
      MOD_RES
<222>
       (11)..(11)
<223>
      AMIDATION
<400> 121
Tyr Arg Cys Glu His Phe Arg Trp Cys Lys Pro
1 5 10
<210>
       122
<211> 11
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (11)..(11)
<223>
      Xaa = Pro reduced from amino acid to amino alcohol
<400> 122
Tyr Arg Cys Glu His Phe Arg Trp Cys Lys Xaa 1 5 10
<210>
       123
<211>
      11
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
       D form
<223>
<220>
<221>
<222>
       MOD_RES
       (11)..(11)
<223>
       AMIDATION
<400>
       123
Tyr Arg Cys Glu His Phe Arg Trp Cys Arg Phe
<210>
       124
<211>
      9
<212> PRT
<213>
      Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = citrulline
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
      AMIDATION
<400> 124
Tyr Xaa Cys Glu His Phe Arg Trp Cys 5
<210> 125
<211> 9
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)...(1)
<223>
      ACETYLATION
<220>
<221>
<222>
       MISC_FEATURE
      (2)..(2)
Xaa = citrulline
<223>
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
       MOD_RES
<222>
       (5)..(5)
<223>
       1-methyl substituted
<220>
<221>
      MOD_RES
<222>
       (6)..(6)
      D form
<223>
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 125
Tyr Xaa Cys Glu His Phe Arg Trp Cys
<210> 126
<211>
      9
      PRT
<212>
<213>
      Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       MISC_FEATURE
       (2)..(2)
Xaa = homoarginine
<222>
<223>
<220>
<221>
       DISULFID
<222>
       (3)..(9)
```

```
<220>
<221>
       MOD_RES
<222>
<223>
       (6)..(6)
       D form
<220>
<221>
<222>
        MOD_RES
       (9)..(9)
<223>
       AMIDATION
<400> 126
Tyr Xaa Cys Glu His Phe Arg Trp Cys 1
      127
9
<210>
<211> 9
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
       MISC_FEATURE
       (2)..(2)
Xaa = 1-beta-homoarginine
<223>
<220>
<221>
<222>
        DISULFID
       (3)..(9)
<220>
<221>
<222>
<223>
        MOD_RES
        (6)..(6)
D form
<220>
<221>
<222>
        MOD_RES
       (9)..(9)
<223>
        AMIDATION
<400>
        127
Tyr Xaa Cys Glu His Phe Arg Trp Cys 5
<210>
      ر
9
        128
<211>
<212> PRT
       Artificial
<213>
<220>
<223> Synthetic construct
```

```
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221> DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
<223>
      D form
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 128
Tyr Lys Cys Glu His Phe Arg Trp Cys 1
<210>
       129
       9
<211>
<212>
      PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
      ACETYLATION
<220>
<221> DISULFID <222> (3)..(9)
<220>
      MOD_RES
<221>
<222>
      (6)..(6)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (9)..(9)
<223>
       AMIDATION
<400> 129
Tyr Ser Cys Glu His Phe Arg Trp Cys 1
<210>
       130
<211>
<212>
       9
      PRT
<213> Artificial
```

```
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
      (3)..(9)
<222>
<220>
<221>
      MOD_RES
      (6)..(6)
D form
<222>
<223>
<220>
<221>
      MOD_RES
<222>
      (9)..(9)
<223>
      AMIDATION
<400> 130
Tyr Val Cys Glu His Phe Arg Trp Cys
1 5
<210>
      131
<211>
      9
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
      MOD_RES
<221>
<222>
      (1)..(1)
<223>
      N-succinyl substituted
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221>
      MOD_RES
      (6)..(6)
D form
<222>
<223>
<400> 131
Tyr Arg Cys Glu His Phe Arg Trp Cys
<210>
      132
<211> 6
<212> PRT
<213> Artificial
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<223>
      Synthetic construct
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
      (3)..(3)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
      AMIDATION
<400> 132
Xaa His Phe Arg Trp Cys
1 5
<210>
      133
<211>
       6
<212>
<213>
      PRT
Artificial
<220>
<223> Synthetic construct
<220>
<221>
      DISULFID
<222> (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
      (1)..(1)
Xaa = homocysteine
<223>
<220>
<221>
       MOD_RES
<222>
       (3)..(3)
<223>
      D form
<400> 133
Xaa His Phe Arg Trp Cys
1 5
<210>
       134
<211>
       6
<212>
       PRT
      Artificial
<213>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> Synthetic construct
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223>
       Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
       (3)..(3)
4-fluoro substituted, D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
      AMIDATION
<223>
<400> 134
Xaa His Phe Arg Trp Cys
<210> 135
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> DISULFID
<222> (1)..(6)
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223>
      xaa = homocysteine
<220>
<221>
      MOD_RES
<222> (3)..(3)
<223> 4-chloro substituted, D form
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<400> 135
Xaa His Phe Arg Trp Cys
<210> 136
<211> 6
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
        MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
<221> DISULFID <222> (1)..(6)
<220>
<221>
        MISC_FEATURE
       (1)..(1)
Xaa = homocysteine
<222>
<223>
<220>
<221>
<222>
       MOD_RES
        (6)..(6)
AMIDATION
<223>
<400> 136
Xaa His Phe Arg Trp Cys
<210>
        137
<211> 6
<212>
      PRT
       Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
        DISULFID
        (1)..(6)
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
Xaa = homocysteine
<223>
<220>
<221>
<222>
       MOD_RES
        (3)..(3)
D form
<223>
<220>
<221>
<222>
        MOD_RES
        (6)..(6)
<223>
        AMIDATION
```

```
<400> 137
Xaa His Phe Arg Trp Cys
1 5
       138
<210>
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
       MISC_FEATURE
       (1)..(1)
Xaa = homocysteine
<222>
<223>
<220>
<221>
       MOD_RES
       (3)..(3)
D form
<222>
<223>
<400> 138
Xaa His Phe Arg Trp Cys
1 5
<210> 139
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
        Synthetic construct
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
       DISULFID
<221>
<222>
        (1)..(6)
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa = homocysteine
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
        MOD_RES
        (3)..(3)
4-fluoro substituted, D form
<223>
<220>
<221>
        MOD_RES
        (6)..(6)
AMIDATION
<222>
<223>
<400>
       139
Xaa His Phe Arg Trp Cys
1 5
<210> 140
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
        MOD_RES
        (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
        DISULFID (1)..(6)
<220>
<221>
        MISC_FEATURE
<222>
       (1)..(1)
Xaa = homocysteine
<223>
<220>
<221>
<222>
        MOD_RES
        (3)..(3)
4-chloro substituted, D form
<223>
<220>
        MOD_RES
<221>
        (6)..(6)
AMIDATION
<222>
<223>
<400> 140
Xaa His Phe Arg Trp Cys
1 5
<210> 141
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
       MOD_RES
       (1)..(1)
<222>
       N-cyclopropanecarbonyl substituted
<223>
<220>
<221>
       DISULFID
       (1)..(6)
<222>
<220>
<221>
       MISC_FEATURE
       (1)..(1)
<222>
<223>
       Xaa = homocysteine
<220>
       MOD_RES
<221>
      (3)..(3)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       AMIDATION
<400> 141
Xaa His Phe Arg Trp Cys
1 5
<210>
      142
<211> 6
<212> PRT
<213>
      Artificial
<220>
      Synthetic construct
<223>
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       N-cyclobutanecarbonyl substituted
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
       (1)..(1)
<223>
      Xaa = homocysteine
<220>
<221>
       MOD_RES
       (3)..(3)
D form
<222>
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<400>
      142
```

```
Xaa His Phe Arg Trp Cys
<210>
      143
<211>
      6
      PRT
<212>
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
      N-cyclopentanecarbonyl substituted
<220>
<221>
       DISULFID
<222>
      (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
      (1)..(1)
xaa = homocysteine
<223>
<220>
<221>
      MOD_RES
<222>
      (3)..(3)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
      AMIDATION
<400> 143
Xaa His Phe Arg Trp Cys
1 5
<210>
       144
<211>
      6
<212>
       PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
       N-cyclohexanecarbonyl substituted
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
      MISC_FEATURE
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (1)..(1)
<223> Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
      (3)..(3)
D form
<223>
<220>
<221>
<222>
       MOD_RES
      (6)..(6)
<223>
      AMIDATION
<400> 144
Xaa His Phe Arg Trp Cys
1 5
<210> 145
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222>
      (1)..(1)
<223> N-hexanoyl substituted
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
       (3)..(3)
<223>
      D form
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
<223>
      AMIDATION
<400> 145
Xaa His Phe Arg Trp Cys
1 5
<210>
       146
<211>
      6
<212> PRT
<213> Artificial
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
      N-benzoyl substituted
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
<222> (1)..(1)
<223> Xaa = homocysteine
<220>
<221> MOD_RES
<222>
      (3)..(3)
<223> D form
<220>
<221>
       MOD_RES
<222>
      (6)..(6)
<223>
      AMIDATION
<400> 146
Xaa His Phe Arg Trp Cys
<210>
      147
<211> 6
<212>
      PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
<222>
      (1)..(1)
<223>
      4-phenylbutyrylsubstituted
<220>
<221>
<222>
      DISULFID
      (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
      (1)..(1)
Xaa = homocysteine
<223>
<220>
<221>
      MOD_RES
<222>
       (3)..(3)
D form
<223>
<220>
<221>
       MOD_RES
<222> (6)..(6)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223>
      AMIDATION
<400> 147
Xaa His Phe Arg Trp Cys
<210>
      148
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      3-guanidinopropionyl substituted
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
      (1)..(1)
<223> Xaa = homocysteine
<220>
<221>
<222>
      MOD_RES
      (3)..(3)
<223>
      D form
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
<223>
      AMIDATION
<400> 148
Xaa His Phe Arg Trp Cys
<210>
      149
<211>
      6
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
       (1)..(1)
<223>
       5-guanidinovaleryl substituted
<220>
      DISULFID
<221>
<222>
      (1)..(6)
```

```
<220>
<221>
       MISC_FEATURE
<222>
      (1)..(1)
<223> Xaa = homocysteine
<220>
<221> MOD_RES
<222> (3)..(3)
<223> D form
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
      AMIDATION
<400> 149
Xaa His Phe Arg Trp Cys
1 5
<210> 150
<211>
      6
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       N-phenylsulfonyl substituted
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221>
       MISC_FEATURE
      (1)..(1)
Xaa = homocysteine
<222>
<223>
<220>
      MOD_RES
<221>
<222>
      (3)..(3)
D form
<223>
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       AMIDATION
<400>
       150
Xaa His Phe Arg Trp Cys
1 5
<210> 151
<211> 6
<212> PRT
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)...(1)
       N-(2-naphthalenesulfonyl) substituted
<223>
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223> xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
      (3)..(3)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<400> 151
Xaa His Phe Arg Trp Cys
<210> 152
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223> N-(4-phenylsulfonamido-4-oxo-butyryl) substituted
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(1)
<223>
       Xaa = homocysteine
<220>
<221> MOD_RES
<222> (3)..(3)
<223> D form
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
<223>
       AMIDATION
<400> 152
Xaa His Phe Arg Trp Cys
1 5
       153
7
<210>
<211>
<212>
      PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       DISULFID
       (2)..(7)
<220>
<221>
<222>
       MISC_FEATURE
       (2)..(2)
Xaa = homocysteine
<223>
<220>
<221>
<222>
<223>
       MOD_RES
       (4)..(4)
D form
<220>
<221>
<222>
       MOD_RES (7)..(7)
<223>
       AMIDATION
<400> 153
Arg Xaa His Phe Arg Trp Cys
1 5
<210>
      154
7
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223>
       D form
<220>
<221>
       DISULFID
<222>
       (2)..(7)
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = homocysteine
<220>
<221>
       MOD_RES
       (4)..(4)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 154
Arg Xaa His Phe Arg Trp Cys
5
<210>
       155
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> DISULFID <222> (2)..(7)
<220>
<221>
       MISC_FEATURE
<222>
      (2)..(2)
Xaa = homocysteine
<223>
<220>
       MOD_RES
<221>
       (4)..(4)
D form
<222>
<223>
<400> 155
Arg Xaa His Phe Arg Trp Cys
5
<210> 156
<211>
<212>
       PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
<222>
       (2)..(7)
<220>
<221>
       MISC_FEATURE
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<222>
      (2)..(2)
<223>
      xaa = homocysteine
<220>
       MISC_FEATURE
<221>
<222>
      (3)..(3)
      1-methyl substituted
<220>
<221>
      MOD_RES
      (4)..(4)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
      (7)..(7)
<223>
      AMIDATION
<400> 156
Arg Xaa His Phe Arg Trp Cys
5
<210> 157
<211> 7
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> DISULFID
<222>
      (2)..(7)
<220>
      MISC_FEATURE
<221>
<222> (2)..(2)
<223> Xaa = homocysteine
<220>
       MOD_RES
<221>
      (3)..(3)
1-methyl substituted, D form
<222>
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
<223>
       D form
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400>
      157
Arg Xaa His Phe Arg Trp Cys
<210> 158
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<211> 7
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID (2)..(7)
<220>
<221>
       MISC_FEATURE
       (2)..(2)
Xaa = homocysteine
<222>
<223>
<220>
<221>
<222>
        MOD_RES
        (4)..(4)
       D form
<223>
<220>
<221>
        MOD_RES
<222>
        (7)..(7)
<223>
       AMIDATION
<400> 158
Arg Xaa His Phe Arg Trp Cys
5
       159
7
<210>
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
        DISULFID
       (2)..(7)
<220>
<221>
        MISC_FEATURE
       (2)..(2)
Xaa = homocysteine
<222>
<223>
<220>
<221>
<222>
        MOD_RES
       (4)..(4)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> D form
<400> 159
Arg Xaa His Phe Arg Trp Cys
5
<210>
       160
<211>
<212>
      PRT
      Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
      MOD_RES
<221>
<222>
      (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
       MISC_FEATURE
      (1)..(1)
      xaa = norleucine
<223>
<220>
<221>
      DISULFID
<222>
      (2)..(7)
<220>
      MISC_FEATURE
<221>
<222>
      (2)..(2)
<223>
      Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
       D form
<223>
<220>
       MOD_RES
<221>
<222>
       (7)^{-}.(7)
<223>
       AMIDATION
<400>
       160
Xaa Xaa His Phe Arg Trp Cys
1 5
<210>
       161
<211>
<212>
      PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
       MOD_RES
<221>
<222>
      (1)..(1)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<223> phenylsulfonyl substituted
<220>
<221>
<222>
       DISULFID (2)..(7)
<220>
<221>
       MISC_FEATURE
<222> (2)..(2)
<223> Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
D form
<223>
<220>
<221>
        MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<400> 161
Gly Xaa His Phe Arg Trp Cys
1
<210> 162
<211> 8
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
<222> (3)..(8)
<220>
       MISC_FEATURE (3)..(3)
<221>
<222>
<223> Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
       (5)..(5)
D form
<223>
<220>
<221>
<222>
       MOD_RES
        (8)..(8)
<223>
        AMIDATION
<400> 162
Tyr Arg Xaa His Phe Arg Trp Cys 5
<210> 16</211> 8
<210>
        163
<212> PRT
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       DISULFID
<222>
      (3)..(8)
<220>
<221>
<222>
      MISC_FEATURE
      (3)..(3)
<223>
      Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
      (5)..(5)
<223>
      D form
<400> 163
Tyr Arg Xaa His Phe Arg Trp Cys 5
<210> 164
<211> 8
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(8)
<220>
<221>
      MISC_FEATURE
<222>
      (3)..(3)
<223> Xaa = homocysteine
<220>
<221>
       MOD_RES
      (5)..(5)
D form
<222>
<223>
<220>
<221>
       MOD_RES
<222>
       (8)..(8)
<223>
      AMIDATION
<400>
       164
Tyr Arg Xaa His Phe Arg Trp Cys
1 5
```

```
<210>
        165
<211>
        8
<212>
        PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
        MOD_RES
        (1)..(1)
ACETYLATION
<223>
<220>
<221> DISULFID <222> (3)..(8)
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = homocysteine
<220>
<221>
<222>
        MOD_RES
        (5)..(5)
D form
<223>
<400> 165
Tyr Arg Xaa His Phe Arg Trp Cys
<210> 16
<211> 9
        166
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
<221>
<222>
        DISULFID
        (3)..(9)
<220>
<221>
<222>
        MISC_FEATURE
       (3)..(3)
Xaa = homocysteine
<223>
<220>
<221>
<222>
        MOD_RES
        (6)..(6)
D form
<223>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MOD_RES
       (9)..(9)
AMIDATION
<222>
<223>
<400> 166
Tyr Arg Xaa Glu His Phe Arg Trp Cys
<210>
       167
<210> 167
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
<223>
       (1)..(1)
       Xaa = homocysteine
<220>
<221>
        MOD_RES
<222>
        (3)..(3)
       beta-cyclohexyl substituted, D form
<220>
        MOD_RES
<221>
       (6)..(6)
AMIDATION
<222>
<223>
<400> 167
Xaa His Ala Arg Trp Cys
1 5
<210> 16</211> 6
       168
<212>
       PRT
<213>
       Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
<222>
        MOD_RES
       (1)..(1)
ACETYLATION
<223>
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221>
      DISULFID
<222>
       (1)..(6)
<220>
<221>
       MISC_FEATURE
       (1)..(1)
Xaa = homocysteine
<222>
<223>
<220>
<221> MOD_RES
<222> (3)..(3)
<223> D form
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222>
       (6)..(6)
       Xaa = penicillamine
<223>
<400> 168
Xaa His Phe Arg Trp Xaa
<210>
      169
<211>
       6
<212>
       PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       Xaa = homocysteine
<220>
<221>
       MOD_RES
<222>
       (3)..(3)
4-chloro substituted, D form
<223>
<220>
      MOD_RES
<221>
<222>
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222>
       (6)..(6)
<223> xaa = penicillamine
<400> 169
Xaa His Phe Arg Trp Xaa
       170
<210>
<211>
<212>
       6
       PRT
<213>
       Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223>
       N-hexanoyl substituted
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       Xaa = homocysteine
<220>
       MOD_RES
<221>
<222> (3)..(3)
<223> D form
<220>
       MOD_RES
<221>
<222>
<223>
       (6)..(6)
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222> (6)..(6)
<223> Xaa = penicillamine
<400> 170
Xaa His Phe Arg Trp Xaa
<210> 171
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221> MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (1)..(1)
<223> N-cyclopentanecarbonyl substituted
<220>
<221>
      DISULFID
<222>
      (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
      (1)..(1)
<223> Xaa = homocysteine
<220>
<221>
      MOD_RES
<222> (3)..(3)
<223> D form
<220>
<221> MOD_RES
<222> (6)..(6)
<223> AMIDATION
<220>
<221>
<222>
      MISC_FEATURE
      (6)..(6)
<223> Xaa = penicillamine
<400> 171
Xaa His Phe Arg Trp Xaa
<210> 172
<211> 6
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      N-cyclohexanecarbonyl substituted
<220>
<221>
      DISULFID
<222> (1)..(6)
<220>
<221>
<222>
      MISC_FEATURE
      (1)..(1)
Xaa = homocysteine
<223>
<220>
      MOD_RES
<221>
<222>
      (3)..(3)
D form
<223>
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<223> AMIDATION
<220>
<221>
<222>
      MISC_FEATURE
      (6)..(6)
<223> xaa = penicillamine
<400> 172
Xaa His Phe Arg <u>T</u>rp Xaa
<210> 173
<211> 6
      PRT
<212>
<213>
      Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      N-benzoyl substituted
<220>
      DISULFID
<221>
<222>
      (1)..(6)
<220>
<221>
<222>
       MISC_FEATURE
      (1)..(1)
xaa = homocysteine
<223>
<220>
<221>
       MOD_RES
<222>
      (3)..(3)
<223>
      D form
<220>
       MOD_RES
<221>
<222>
      (6)..(6)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
<222>
       (6)..(6)
      Xaa = penicillamine
<223>
<400> 173
Xaa His Phe Arg Trp Xaa
<210>
      174
<211> 6
      PRT
Artificial
<212>
<213>
<220>
<223>
      Synthetic construct
```

```
<220>
       MOD_RES
<221>
<222>
       (1)..(1)
<223>
       4-phenylbutyryl substituted
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       Xaa = homocysteine
<220>
<221>
       MOD_RES
<222>
       (3)..(3)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222>
<223>
       (6)..(6)
       Xaa = penicillamine
<400> 174
Xaa His Phe Arg Trp Xaa
      175
6
<210>
<211>
<212> PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       N-phenylsulfonyl substituted
<220>
<221>
<222>
       DISULFID
       (1)..(6)
<220>
<221>
       MISC_FEATURE
<222>
<223>
       (1)..(1)
       Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
<222> (3)..(3)
<223> D form
```

```
<220>
<221>
<222>
       MOD_RES
      (6)..(6)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
<222>
       (6)..(6)
<223>
      Xaa = penicillamine
<400> 175
Xaa His Phe Arg Trp Xaa
1 5
<210>
       176
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
      MOD_RES
<222>
       (1)..(1)
       (4-benzenesulfonamide)butyryl substituted
<223>
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
      MISC_FEATURE
<222>
       (1)..(1)
<223>
      Xaa = homocysteine
<220>
<221>
<222>
       MOD_RES
      (3)..(3)
D form
<223>
<220>
       MOD_RES
<221>
<222>
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222>
       (6)..(6)
       Xaa = penicillamine
<223>
<400>
       176
Xaa His Phe Arg Trp Xaa
<210>
       177
<211>
<212>
      PRT
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> MOD_RES <222> (1)..(1)
<223> ACETYLATION
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223>
      Xaa = norleucine
<220>
<221>
<222>
       DISULFID
      (2)..(7)
<220>
<221>
<222>
       MISC_FEATURE
       (2)..(2)
<223>
      Xaa = homocysteine
<220>
<221>
       MOD_RES
<222>
      (4)..(4)
<223>
      D form
<220>
<221>
<222>
      MOD_RES (7)..(7)
<223>
      AMIDATION
<220>
<221>
<222>
      MISC_FEATURE
       (7)..(7)
      Xaa = penicillamine
<400> 177
Xaa Xaa His Phe Arg Trp Xaa
1
<210> 178
<211> 7
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
       (1)..(1)
<223> N-phenylsulfonyl substituted
<220>
<221> DISULFID
<222> (2)..(7)
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
        MISC_FEATURE
       (2)..(2)
<223>
       Xaa = homocysteine
<220>
<221>
<222>
        MOD_RES
       (4)..(4)
       D form
<223>
<220>
<221>
<222>
       MOD_RES
       (7)..(7)
<223>
       AMIDATION
<220>
<221>
<222>
        MISC_FEATURE
       (7)..(7)
<223>
       Xaa = penicillamine
<400> 178
Gly Xaa His Phe Arg Trp Xaa
1 5
<210>
       179
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
      Xaa = desamino Cys
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
<222>
        MOD_RES
       (3)..(3)
D form
<223>
<220>
<221>
<222>
        MOD_RES
       (6)..(6)
<223>
        AMIDATION
<220>
<221>
<222>
        MISC_FEATURE
       (6)..(6)
<223>
       Xaa = homocysteine
<400>
       179
Xaa His Phe Arg Trp Xaa
1 5
```

```
<210>
       180
<211>
       6
<212>
       PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
<222>
       MOD_RES
       (3)..(3)
D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222>
       (6)..(6)
<223>
      Xaa = homocysteine
<400> 180
Cys His Phe Arg Trp Xaa
1 5
<210>
       181
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
<222>
       MOD_RES
(3)..(3)
4-fluoro substituted, D form
<223>
<220>
<221>
<222>
       MOD_RES
       (6)..(6)
<223>
       AMIDATION
<220>
<221>
<222>
       MISC_FEATURE
       (6)..(6)
       Xaa = homocysteine
<223>
<400>
       181
```

```
Cys His Phe Arg Trp Xaa
1 5
<210> 182
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
        DISULFID
<222>
       (1)..(6)
<220>
<221>
       MOD_RES
       (3)..(3)
4-chloro substituted, D form
<222>
<223>
<220>
<221>
       MOD_RES
      (6)..(6)
AMIDATION
<222>
<223>
<220>
<221>
      MISC_FEATURE
<222>
<223>
      (6)..(6)
Xaa = homocysteine
<400> 182
Cys His Phe Arg Trp Xaa 5
<210> 183
<211> 6
<212> PRT
<213> Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
<222>
       MOD_RES (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
       MOD_RES
       (3)..(3)
D form
<222>
<223>
<220>
<221> MOD_RES
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<222> (6)..(6) <223> AMIDATION
<220>
        MISC_FEATURE
<221>
       (6)..(6)
Xaa = homocysteine
<222>
<223>
<400>
       183
Cys His Phe Arg Trp Xaa 1 5
<210> 184
<211> 6
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
       MOD_RES
<221>
       (1)..(1)
ACETYLATION
<222>
<223>
<220>
<221>
       DISULFID
<222>
       (1)..(6)
<220>
<221>
       MOD_RES
<222>
       (3)..(3)
4-fluoro substituted, D form
<223>
<220>
<221> MOD_RES <222> (6)..(6)
       (6)..(6)
<223>
       AMIDATION
<220>
        MISC_FEATURE
<221>
       (6)..(6)
Xaa = homocysteine
<222>
<223>
<400> 184
Cys His Phe Arg Trp Xaa 1 5
<210>
       185
<211>
<212>
        6
       PRT
       Artificial
<213>
<220>
<223>
        Synthetic construct
<220>
<221> MOD_RES
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222> (1)..(1)
<223> ACETYLATION
<220>
<221>
       DISULFID
<222>
      (1)..(6)
<220>
      MOD_RES
<221>
<222>
       (3)..(3)
<223>
      4-chloro substituted, D form
<220>
<221>
      MOD_RES
<222> (6)..(6)
<223> AMIDATION
<220>
      MISC_FEATURE
<221>
<222>
       (6)..(6)
<223>
      Xaa = homocysteine
<400> 185
Cys His Phe Arg Trp Xaa
1 5
<210> 186
<211> 7
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221> DISULFID
<222>
       (2)..(7)
<220>
<221>
       MOD_RES
<222> (4)..(4)
<223> D form
<220>
<221> MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<220>
       MISC_FEATURE
<221>
<222>
       (7)..(7)
<223>
       Xaa = homocysteine
<400> 186
Arg Cys His Phe Arg Trp Xaa
1 5
<210> 187
<211>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
      DISULFID
<222>
      (2)..(7)
<220>
<221>
<222>
       MOD_RES
      (4)..(4)
4-fluoro substituted, D form
<220>
<221>
<222>
       MOD_RES
      (7)..(7)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
      (7)..(7)
Xaa = homocysteine
<222>
<223>
<400> 187
Arg Cys His Phe Arg Trp Xaa
1 5
<210>
       188
<211>
<212> PRT
<213> Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       DISULFID
<222>
      (2)..(7)
<220>
<221>
       MOD_RES
<222>
      (4)..(4)
      4-chloro substituted, D form
<223>
<220>
<221>
      MOD_RES
<222>
      (7)..(7)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
<222>
       (7)..(7)
<223>
      Xaa = homocysteine
<400> 188
Arg Cys His Phe Arg Trp Xaa
1 5
```

```
<210>
       189
<211>
       7
<212>
       PRT
       Artificial
<213>
<220>
<223>
      Synthetic construct
<220>
<221>
       MOD_RES
<222>
      (1)..(1)
<223>
       ACETYLATION
<220>
<221>
      DISULFID
<222>
      (2)..(7)
<220>
<221>
<222>
       MOD_RES
       (4)..(4)
<223>
       D form
<220>
<221>
       MOD_RES
<222>
       (7)..(7)
<223>
       AMIDATION
<220>
<221>
       MISC_FEATURE
<222>
       (7)..(7)
Xaa = homocysteine
<223>
<400>
       189
Arg Cys His Phe Arg Trp Xaa 5
      190
7
<210>
<211>
<212>
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (2)..(7)
<220>
<221>
       MOD_RES
<222>
       (4)..(4)
<223>
      4-fluòro substituted, D form
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
      MOD_RES
      (7)..(7)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
<222>
      (7)..(7)
      Xaa = homocysteine
<400> 190
Arg Cys His Phe Arg Trp Xaa
1 5
<210> 191
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (2)..(7)
<220>
<221>
      MOD_RES
<222>
      (4)..(4)
<223> 4-chloro substituted, D form
<220>
<221>
      MOD_RES
<222>
      (7)..(7)
<223>
      AMIDATION
<220>
<221> MISC_FEATURE
<222>
      (7)..(7)
<223> Xaa = homocysteine
<400> 191
Arg Cys His Phe Arg Trp Xaa
1
<210> 192
<211> 9
<212> PRT
<213> Artificial
<220>
     Synthetic construct
<223>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (3)..(9)
<220>
<221>
<222>
        MOD_RES
        (6)..(6)
<223>
        D form
<220>
<221>
<222>
       MOD_RES
       (9)..(9)
<223>
       AMIDATION
<220>
<221>
<222>
       MISC_FEATURE
       (9)..(9)
Xaa = homocysteine
<223>
<400>
       192
Tyr Arg Cys Glu His Phe Arg Trp Xaa
1 5
<210>
        193
<211>
       6
<212>
       PRT
<213>
       Artificial
<220>
<223>
        Synthetic construct
<220>
<221>
<222>
        MOD_RES
        (1)..(1)
<223>
        ACETYLATION
<220>
<221>
        DISULFID
<222>
        (1)..(6)
<220>
<221>
        MISC_FEATURE
<222>
       (1)..(1)
Xaa = homocysteine
<223>
<220>
<221>
        MOD_RES
       (3)..(3)
D form
<222>
<223>
<220>
<221>
<222>
        MOD_RES
        (6)..(6)
<223>
        AMIDATION
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> MISC_FEATURE
<222>
       (6)..(6)
<223>
      Xaa = homocysteine
<400> 193
Xaa His Phe Arg Trp Xaa
1 5
       194
7
<210>
<211>
<212> PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       DISULFID
       (2)..(7)
<220>
       MISC_FEATURE
(2)..(2)
Xaa = homocysteine
<221>
<222>
<223>
<220>
<221> MOD_RES <222> (4)..(4)
<222> (4)..(4)
<223> D form
<220>
<221>
<222>
       MOD_RES
       (7)..(7)
<223> AMIDATION
<220>
<221>
<222>
       MISC_FEATURE
        (7)..(7)
<223>
      Xaa = homocysteine
<400> 194
Arg Xaa His Phe Arg Trp Xaa 1
<210>
        195
<211>
<212>
       PRT
<213> Artificial
<220>
<223> Synthetic construct
<220>
<221>
<222>
       MOD_RES
        (1)..(1)
<223>
       ACETYLATION
<220>
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<221> DISULFID
<222>
      (2)..(7)
<220>
       MISC_FEATURE
<221>
<222>
      (2)..(2)
<223>
      Xaa = homocysteine
<220>
<221>
      MOD_RES
<222>
      (4)..(4)
      D form
<223>
<220>
<221>
      MOD_RES
<222>
      (7)..(7)
<223>
      AMIDATION
<220>
      MISC_FEATURE
<221>
<222>
      (7)..(7)
      Xaa = homocysteine
<400> 195
Arg Xaa His Phe Arg Trp Xaa
1 5
<210>
      196
<211>
<212>
      8
      PRT
      Artificial
<213>
<220>
<223> Synthetic construct
<220>
<221>
      MOD_RES
<222>
      (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(8)
<220>
<221>
      MISC_FEATURE
      (3)..(3)
<222>
<223>
      Xaa = homocysteine
<220>
<221>
      MOD_RES
      (5)..(5)
D form
<222>
<223>
<220>
<221>
      MOD_RES
<222>
      (8)..(8)
<223>
      AMIDATION
<220>
<221>
      MISC_FEATURE
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222>
       (8)..(8)
       Xaa = homocysteine
<400>
       196
Tyr Arg Xaa His Phe Arg Trp Xaa
<210>
       197
<211>
       9
<212>
      PRT
<213>
      Artificial
<220>
<223> Synthetic construct
<220>
<221>
       MOD_RES
<222>
       (1)..(1)
<223>
      ACETYLATION
<220>
<221>
      DISULFID
<222>
      (3)..(9)
<220>
<221> MISC_FEATURE
<222>
       (3)..(3)
<223> Xaa = homocysteine
<220>
<221>
       MOD_RES
<222>
      (6)..(6)
<223>
      D form
<220>
<221>
<222>
      MOD_RES
      (9)..(9)
<223>
      AMIDATION
<220>
      MISC_FEATURE
<221>
<222>
      (9)..(9)
<223>
      Xaa = homocysteine
<400> 197
Tyr Arg Xaa Glu His Phe Arg Trp Xaa
<210>
      198
<211>
      6
<212>
      PRT
      Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
       MOD_RES
```

```
x16438 rev'd 10-July-2006 (US).ST25.txt
<222>
      (1)..(1)
<223>
       ACETYLATION
<220>
<221>
       DISULFID
<222>
       (1)..(6)
      S-CH2-S linkage
<223>
<220>
       MOD_RES
<221>
<222>
      (3)..(3)
<223>
      D form
<220>
<221>
       MOD_RES
<222>
       (6)..(6)
<223>
       AMIDATION
<400>
     198
Cys His Phe Arg Trp Cys
1 5
<210>
       199
<211>
       9
<212>
      PRT
<213>
      Artificial
<220>
<223>
      Synthetic construct
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       xaa = Arg, Tyr-Arg, Tyr-beta-Arg, or is absent
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
       Xaa = a modified amino acid including Arg, citrulline,
<223>
       homoarginine, Leu, Lys, N-isopropyl-Lys, norleucine, ornithine,
       or val
<220>
<221>
<222>
       MISC_FEATURE
       (1)..(1)
<223>
       Xaa = a modified group including Tyr-Arg, Tyr-citrulline,
       Cya-Arg, Tyr-homoarginine, Tyr-1-beta-homoarginine, Tyr-Lys,
       Tyr-Ser, or Tyr-Val
<220>
<221>
       DISULFID
<222>
       (2)..(8)
       S-S or S-CH2-S disulfide bridge
<223>
<220>
<221>
       MISC_FEATURE
<222>
       (2)..(2)
       Xaa = Cys, homocysteine, or desamino-cysteine; may be D or L form
<223>
<220>
<221>
       MISC_FEATURE
```

```
X16438 rev'd 10-July-2006 (US).ST25.txt
<222>
       (3)..(3)
<223>
       Xaa = Glu, Gln, Asp, Asn, Ala, Gly, Thr, Ser, Pro, Met, Ile, Val,
       Arg, His, Tyr, Trp, Phe, Lys, Leu, cysteic acid, or is absent
<220>
<221>
       MISC_FEATURE
<222>
       (4)..(4)
       Xaa = His, modified His, or modified Ala; D or L form
<223>
<220>
<221>
<222>
       MISC_FEATURE
       (5)..(5)
<223>
       Xaa = Phe, modified Phe, or modified Ala; D or L form
<220>
<221>
       MISC_FEATURE
<222>
       (6)..(6)
<223>
       Xaa = Arg or modified Arg; D or L form
<220>
<221>
       MISC_FEATURE
<222>
       (8)..(8)
       Xaa = Cys, homocysteine, or modified cysteine or homocysteine
<223>
       (such as amide, alcohol, or penicillamine)
<220>
<221>
       MISC_FEATURE
<222>
       (9)..(9)
       Xaa = Ser-Pro-NH2, Lys-Pro-NH2, Ser-OH, Ser-Pro-OH, Lys-OH, Ser alcohol, Ser-Pro alcohol, Arg-Phe-NH2, Glu-NH2, or is absent
<223>
<400>
       199
Xaa Xaa Xaa Xaa Xaa Trp Xaa Xaa
<210>
       200
<211>
       8
<212>
       PRT
       Artificial
<213>
<220>
<223>
       Synthetic construct
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       Xaa = Arg, Tyr-Arg, Tyr-beta-Arg, or is absent
<220>
<221>
       MISC_FEATURE
<222>
<223>
       Xaa = a modified amino acid including Arg, citrulline,
       homoarginine, Leu, Lys, N-isopropyl-Lys, norleucine, ornithine,
       or Val
<220>
<221>
<222>
       MISC_FEATURE
        (1)..(1)
<223>
       Xaa = a modified group including Tyr-Arg, Tyr-citrulline,
       Cya-Arg, Tyr-homoarginine, Tyr-1-beta-homoarginine, Tyr-Lys,
       Tyr-Ser, or Tyr-Val
```

```
<220>
<221>
       DISULFID
<222>
       (2)..(8)
<220>
<221>
       MISC_FEATURE
<222>
       (2)..(2)
<223>
       Xaa = Cys or homocysteine
<220>
<221>
       MISC_FEATURE
<222>
       (3)..(3)
       Xaa = Glu, Gln, Asp, Asn, Ala, Gly, Thr, Ser, Pro, Met, Ile, Val, Arg, His, Tyr, Trp, Phe, Lys, Leu, cysteic acid, or is absent
<223>
<220>
<221>
       MOD_RES
<222>
       (4)..(4)
<223>
       His may be optionally substituted, D or L form
<220>
       MOD_RES
<221>
<222>
       (5)..(5)
       Phe may be optionally substituted, D or L form
<223>
<220>
       MISC_FEATURE
<221>
<222>
       (8)..(8)
       Xaa = Cys, homocysteine, or modified cysteine or homocysteine
<223>
       such as amide
<220>
<221>
<222>
       MISC_FEATURE
       (9)..(9)
       Xaa = Ser-Pro-NH2, Lys-Pro-NH2, Ser-OH, Ser-Pro-OH, Lys-OH, Ser
<223>
       alcohol, Ser-Pro alcohol, Arg-Phe-NH2, Glu-NH2, or is absent
<400>
       200
Xaa Xaa Xaa His Phe Arg Xaa Xaa
<210>
       201
<211>
       9
<212>
       PRT
<213>
       Artificial
<220>
<223>
       Synthetic construct
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
<223>
       Xaa = Arg, Tyr-Arg, Tyr-beta-Arg, or is absent
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(1)
       Xaa = a modified amino acid including Arg, citrulline,
<223>
       homoarginine, Leu, Lys, N-isopropyl-Lys, norleucine, ornithine,
       or Val
```

```
<220>
<221>
        MISC_FEATURE
<222>
        (1)..(1)
        Xaa = a modified group including Tyr-Arg, Tyr-citrulline,
Tyr-homoarginine, Tyr-1-beta-homoarginine, Tyr-Lys, Tyr-Ser, or
<223>
<220>
<221>
<222>
        DISULFID
        (2)..(8)
<220>
<221>
<222>
        MISC_FEATURE
        (2)..(2)
<223>
        Xaa = Cys or homocysteine
<220>
<221>
<222>
        MISC_FEATURE
        (3)..(3)
        Xaa = Glu, Gln, Asp, Asn, Ala, Gly, Thr, Ser, Pro, Met, Ile, Val, Arg, His, Tyr, Trp, Phe, or is absent
<223>
<220>
<221>
<222>
        MOD_RES
        (4)..(4)
<223>
        His may be optionally substituted, D or L form
<220>
<221>
<222>
        MOD_RES
        (5)..(5)
<223>
        Phe may be optionally substituted, D or L form
<220>
<221>
        MISC_FEATURE
<222>
        (8)..(8)
<223>
        Xaa = Cys, homocysteine, or modified cysteine or homocysteine
        such as amide
<220>
<221>
        MISC_FEATURE
        (9)..(9)
Xaa = Ser-Pro-NH2, Lys-Pro-NH2, Ser-OH, Ser-Pro-OH, Lys-Pro-OH,
<222>
<223>
        Arg-Phe-NH2, Glu-NH2, or is absent
<400>
        201
Xaa Xaa Xaa His Phe Arg Trp Xaa Xaa
```